

WHAT IS CLAIMED IS:

1 1. (Currently amended) A siding panel for facing a structural surface
2 substantially defining a plane, wherein:

3 a plurality of such panels are mountable on the structural surface parallel
4 to one another along a direction of elongation, in lapped courses;

5 at least certain of the building panels comprise butt joint structures
6 joining said certain building panels with other such panels end to end in the
7 direction of elongation, and wherein the panels have first and second ends of
8 which the first end of one of the panels mates with the second end of another of
9 the panels; and,

10 wherein the complementary joint structures comprise at least one of
11 edges and slots by which the first and second ends are engageable by end to
12 end insertion in the direction of elongation, and said at least one of the edges
13 and slots is formed by discontinuous lengths that are spaced so as to
14 permit overlapping edges of the panels to pass between one another in a
15 direction perpendicular to the plane of the surface, whereupon
16 subsequent displacement parallel to the plane of the surface engages the
17 first and second ends; and,

18 wherein the panels and said edges and slots are structured to enable the
19 first and second ends to be engaged by relative movement in a direction
20 perpendicular to the direction of elongation.

1 2. (Originally presented) The siding panel of claim 1, wherein said at
2 least one of the edges and slots are formed by substantially parallel web
3 portions spaced from the plane of the structural surface, alternatively fittable
4 into one another along the direction of elongation, and along a direction
5 perpendicular to the direction of elongation and parallel to the plane of the
6 surface.

3. (Canceled)

1 4. (Currently amended) ~~The siding panel of claim 1, A siding panel~~
2 ~~for facing a structural surface substantially defining a plane, wherein:~~
3 ~~a plurality of such panels are mountable on the structural surface~~
4 ~~parallel to one another along a direction of elongation, in lapped courses;~~
5 ~~at least certain of the building panels comprise butt joint structures~~
6 ~~joining said certain building panels with other such panels end to end in~~
7 ~~the direction of elongation, and wherein the panels have first and second~~
8 ~~ends of which the first end of one of the panels mates with the second~~
9 ~~end of another of the panels;~~

10 wherein at least one of the first and second ends has two parallel
11 web portions spaced apart in a direction normal to the plane of the
12 structural surface, the two parallel web portions being spaced by
13 substantially a thickness of an edge of the other of the at least one of the
14 first and second ends, received between the two parallel web portions for
15 joining the panels end to end;

16 wherein the two parallel web portions are discontinuous in a
17 lapping direction parallel to the surface and perpendicular to the direction
18 of elongation, forming tabs and gaps that are positioned to pass laterally
19 into one another, whereupon subsequent displacement in the lapping
20 direction joins the first and second ends; and,

21 wherein each of the panels forms a sawtooth in cross section, with at
22 least an upper and a lower sloping flat part being integrally joined at a step
23 along a lower edge of the upper sloping flat part, the panel thereby forming at
24 least two courses of said sloping flat parts.

5. (Canceled)

6. (Canceled)

1 7. (Originally presented) The siding panel of claim 4, wherein the
2 butt joint structure comprises at least one tab spaced from a back side surface
3 of one of the first and second ends by a distance substantially equal to a
4 thickness of the other of the first and second ends that fits between the tab and
5 the back side surface in an end-wise overlap of the first and second ends.

1 8. (Originally presented) The siding panel of claim 7, wherein the tab
2 is placed adjacent to the step at the lower edge of the upper sloping flat part.

1 9. (Originally presented) The siding panel of claim 7, wherein the
2 step at the lower edge of the upper sloping flat part at one of the first and
3 second ends is cut away from an edge of the panel by a clearance distance
4 permitting an engaging part of the other of the first and second ends to pass
5 between the upper and lower sloping flat parts.

10. (Canceled)

11. (Canceled)

1 12. (Currently amended) The siding panel of claim ~~4~~ **4**, wherein at
2 least one of the web portions ~~edges and the slots~~ is tapered in an insertion
3 direction.

1 13. (Originally presented) The siding panel of claim 12, wherein at
2 least one of the web portions ~~edges and the slots~~ is shaped to form a frictional
3 restriction that engages without a specific detent position.

14. (Canceled)

15. (Canceled)

16. (Canceled)

1 17. (Currently amended) A method for joining abutting ends of panels
2 covering a surface in courses, comprising:

3 providing a panel structure having a sawtooth cross section with at least
4 two sloping parts joined by a step at a lower edge of an upper one of the
5 sloping parts, and complementary joint structures facing in opposite directions
6 along an elongation of the panels, whereof a first end of one such panel joins to
7 a second end of another such panel;

8 providing a tab raised from a back side surface of one of the first and
9 second end, placed to capture an edge of the other of the first and second end
10 between the tab and the back side surface, at a position above the step on said
11 other of the first and second end;

12 providing an opening clearance in the step at the lower edge of the upper
13 one of the sloping parts; ~~and~~,

14 passing the tab through the opening clearance in the step when affixing
15 the complementary joint structures

16 providing at least one additional tab along at least one of the upper
17 and lower sloping surfaces;

18 providing a gap along an edge of one of the upper and lower
19 sloping surfaces for the additional tab, said gap along the edge being
20 relatively lower than a final position of the tab;

21 laying the first and second ends of the panels over one another;

22 pressing the additional tab through the gap along the edge; and,

23 displacing the first and second ends relative to one another so as to
24 capture the edge of one said panel between the back side surface and the
25 respective tab and additional tab another said panel, the tab passing
26 through the opening clearance when displacing said first and second
27 ends.

18. (Canceled)

1 19. (Originally presented) The method of claim 17, comprising
2 providing the additional tab on each of the upper and lower sloping surfaces.

1 20. (Originally presented) The method of claim 17, further comprising
2 engaging one of said panels during installation, by a frictional engagement with
3 an installed second one of said panels, at least at one of a butt joint and an
4 overlap joint, and temporarily holding said one of the panels.

1 21. (Originally presented) The method of claim 20, wherein said
2 frictional engagement is made over a span of insertion depth of said one of the
3 butt joint and the overlap joint, without defining a temperature dependent
4 position.

1 22. (New) The siding panel of claim 1, wherein each of the panels
2 forms a sawtooth in cross section, with at least an upper and a lower
3 sloping flat part being integrally joined at a step along a lower edge of the
4 upper sloping flat part, the panel thereby forming at least two courses of
5 said sloping flat parts.

1 23. (New) The siding panel of claim 1, wherein the butt joint
2 structure comprises at least one tab spaced from a back side surface of
3 one of the first and second ends by a distance substantially equal to a
4 thickness of the other of the first and second ends that fits between the
5 tab and the back side surface in an end-wise overlap of the first and
6 second ends.

1 24. (New) The siding panel of claim 1, wherein at least one of the
2 edges and the slots is tapered in an insertion direction.

1 25. (New) The siding panel of claim 4, wherein said web portions
2 are alternatively fittable into one another along the direction of elongation,

3 and along a direction perpendicular to the direction of elongation and
4 parallel to the plane of the surface.

1 26. (New) The siding panel of claim 4, wherein said web portions
2 are formed by discontinuous lengths that are spaced so as to permit
3 overlapping edges of the panels to pass between one another in a
4 direction perpendicular to the plane of the surface, whereupon
5 subsequent displacement parallel to the plane of the surface engages the
6 first and second ends.